

REMARKS

The Final Office Action mailed March 9, 2006 has been carefully considered. Reconsideration in view of the following remarks is respectfully requested.

Subject Matter Indicated Allowed or Allowable

Applicants are grateful for the indication of allowability of claims 14, 16 and 17, subject to their re-writing in independent form. Claims 14, 16 and 17 have been so re-written.

Rejection(s) Under 35 U.S.C. § 102

Claims 1 and 19 are rejected under 35 U.S.C. § 102(b) as anticipated by Howell (U.S. Pat. No. 4,631,622).

It will be appreciated that, according to the M.P.E.P., a claim is anticipated under 35 U.S.C. § 102 only if each and every claim element is found, either expressly or inherently described, in a single prior art reference.¹ The aforementioned reasons clearly indicate the contrary, and withdrawal of the 35 U.S.C. § 102 rejection based on Howell is respectfully urged.

Rejection(s) Under 35 U.S.C. § 103 (a)

Claims 2-12 and 20-23 were rejected under 35 U.S.C. § 103(a) as unpatentable over Howell (U.S. Pat. No. 4,631,622) in view of Benmouyal et al. (U.S. Pat. No. 6,757,146).

Claims 13 and 15 were rejected under 35 U.S.C. § 103(a) as unpatentable over Howell (U.S. Pat. No. 4,631,622) in view of Andersen (U.S. Pat. No. 6,282,499).

¹ Manual of Patent Examining Procedure (MPEP) § 2131. See also *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Claim 18 was rejected under 35 U.S.C. § 103(a) as unpatentable over Howell (U.S. Pat. No. 4,631,622).

U.S. 4,631,622 relates to the improved protection of a secondary distribution system by automatic coordination of the static trip circuit breaker characteristics (see column lines 6-9).

When an “upstream” breaker is feeding only “downstream” breakers, such that no loads *per se* are connected directly to the upstream breaker, the upstream breaker can also provide low current protection for phase-to-phase or phase-to-neutral faults occurring between the upstream and downstream breakers, in addition to and analogous to ground fault protection (see column 1 lines 9-16).

The features of the system for said improved protection of a secondary power distribution system by automatic coordination of breaker characteristics is described from column 2 line 24 to column 3 line 38, in view of figure 1.

Said system, fed by an incoming power line 11, comprises:

- a first pair of contact 12 connected with a first current sensing transformer 19 and controlled by a static trip circuit 15,
- a second pair of contacts 35 in series with and downstream from said first contacts 12 and connected with a second current sensing transformer 41,
- a third pair of contacts 36 downstream from said first contacts 12 connected in parallel with said second contacts 35 and connected with a third current sensing transformer 52,
- a first differential current transformer 45 connected with said second and third transformers 41 and 52 for vectorial summing of downstream currents through said second and third contacts 35 and 36,
- a second differential current transformer 25 connected with said first current sensing transformer 19 and said first differential current transformer 45 for vectorial subtracting of upstream current from said downstream currents and opening said first contacts 12 to interrupt said protected circuit upon the occurrence of a predetermined difference.

The output of the transformer 25 is then processed within a differential current trip circuit 17 having both I^2t and fixed-time-band characteristics.

The purpose of US 4,631,622 is to propose a coordination between an upstream breaker and a plurality of downstream breakers for providing low current protection for phase-to-phase or phase-to-neutral faults occurring between the upstream and the downstream breakers. Such coordination is provided by vectorially sensing the difference between the upstream breaker currents and the sum of the downstream breaker currents by means of a differential current transformer (see from column 1 line 65 to column 2 line 15).

US 4,631,622 does not disclose a device and a process for protection against over currents in an electrical energy distribution cabinet, as clearly set forth in claims 1 and 19. Such an electrical energy distribution cabinet, as described in the present application in page 1 lines 1-8 for instance, permits the distribution of electrical energy supplied by one or more sources—for example, generators driven by the engines of an aircraft—to a plurality of loads, particularly such as transformers, motors, etc, and may server as the electric center (or “core”) of an aircraft. The other applied references fail to remedy this shortcoming and the claimed invention is therefore patentably distinct thereover.

Conclusion


In view of the preceding discussion, Applicants respectfully urge that the claims of the present application define patentable subject matter and should be passed to allowance.

If the Examiner believes that a telephone call would help advance prosecution of the present invention, the Examiner is kindly invited to call the undersigned attorney at the number below.

Please charge any additional required fees, including those necessary to obtain extensions of time to render timely the filing of the instant Amendment and/or Reply to Office Action, or credit any overpayment not otherwise credited, to our deposit account no. 50-1698.

Respectfully submitted,
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